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~_/		4,771,465		1988-09-13	BRONSON et al.				
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41-	l _	5,127,054		1992-06-30	HONG et al.				
44-	1	5,684,920	 	1997-11-04	IWAKAMI et al.				
44-	l .	5,687,191		1997-11-11	LEE et al.				
┦	<u> </u>		 -	1987-05-19	ARJMAND et al.		i -		
	1	4,667,340 5,068,899	 	1991-11-26	ELLIS et al.		†		
11		. ·	 	12-1988	Mazor et al.	704/203			
44-		4,790,016		10-1998	Zinser, Jr., R. L.	704/262	: -		
		,776,014		11-1997	Hawks, Timothy J.	381/1	┼──		
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